



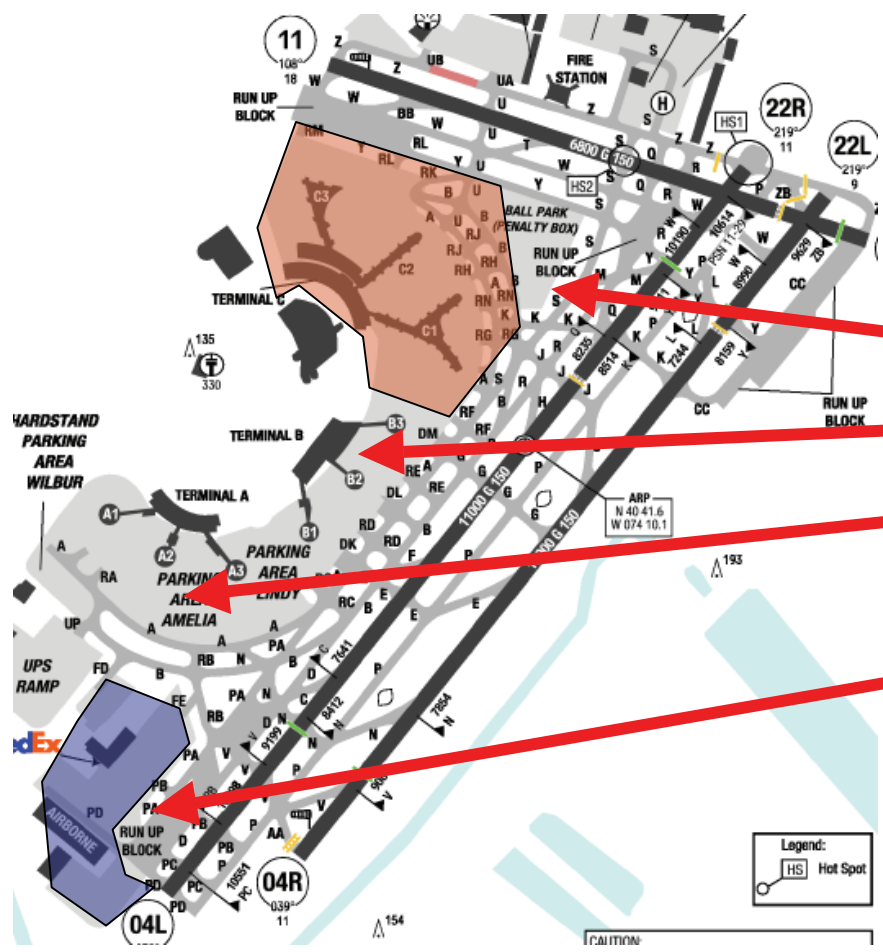
A SYSTEM Solution

EWG, Ga Tech

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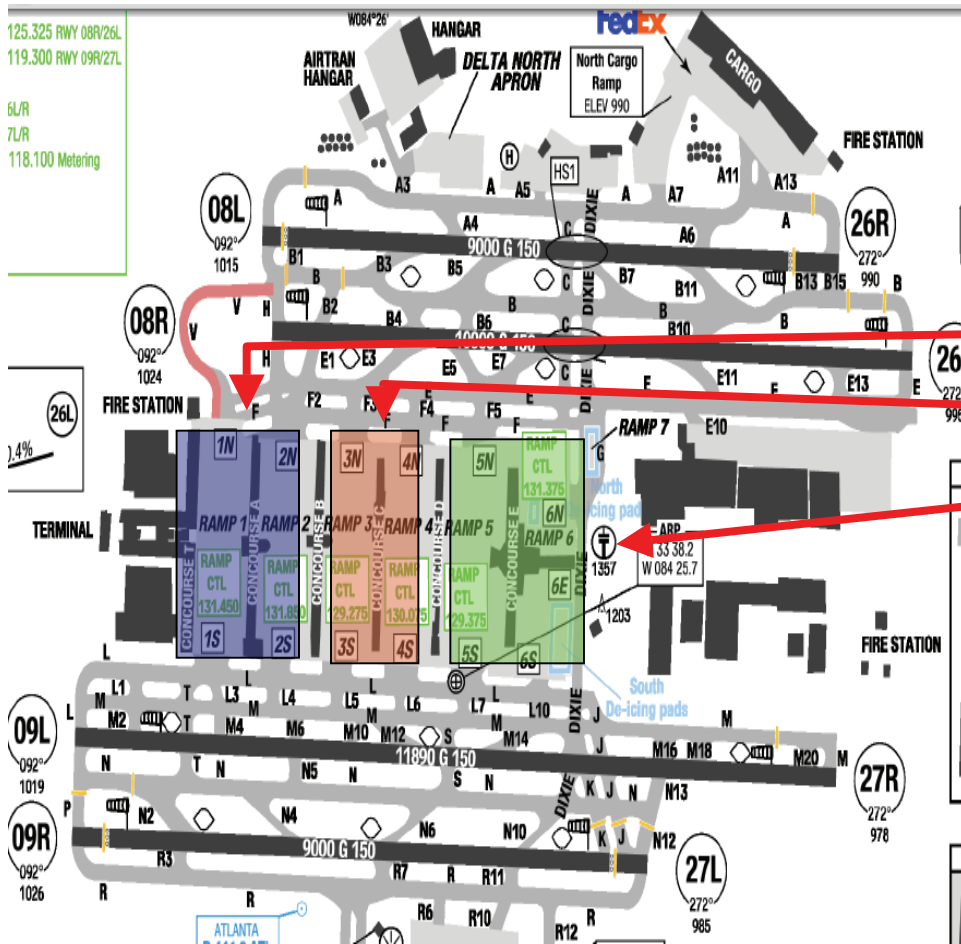
Today's State Non-Centric Ops



EWR

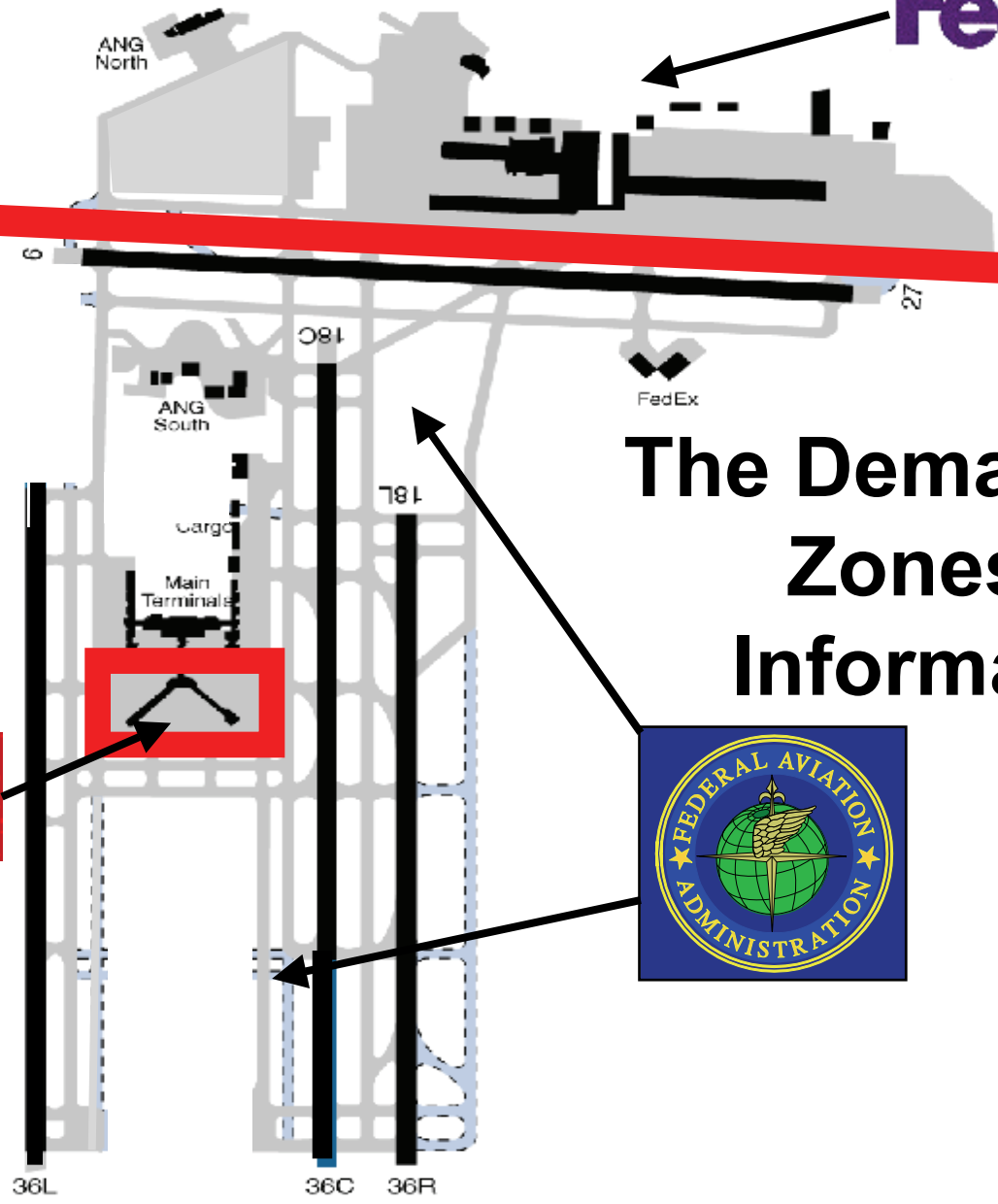
- COA Ramp Tower
- Port Ramp Tower
- 3 separate functions controlling push back
- FedEx Ramp Control

Today's State Non-Centric Ops



ATL


- Ramp Tower Delta
 - Ramp Tower TBI
 - Ramp Tower TBI
- Delta has Flt Coord. in all three locations



The Demarcation Zones of Information




System Approach to System Issues

CAPACITY CAPTURING =  & - 

SILOS of INFO

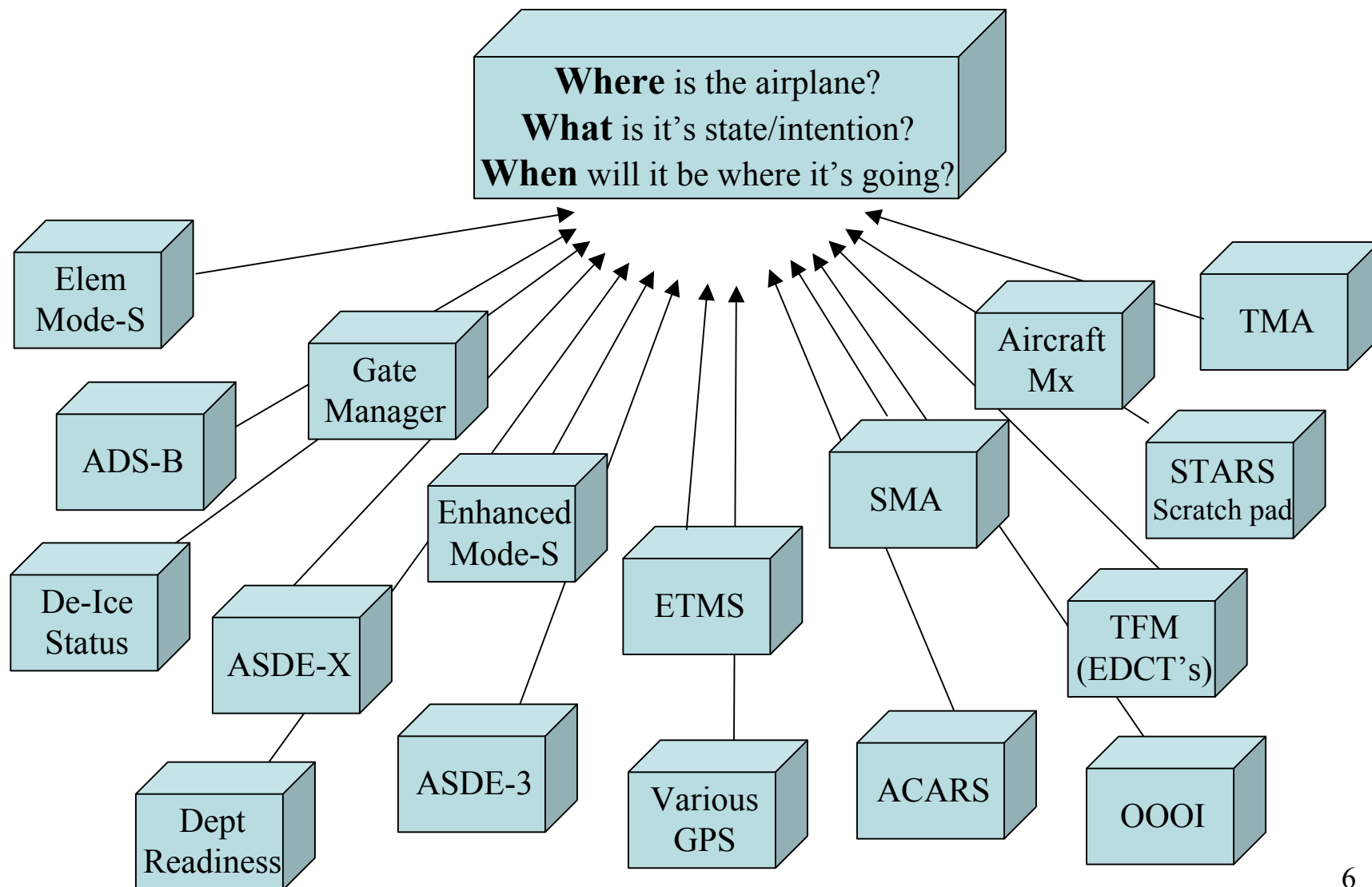


=  + more

Result in less Capacity



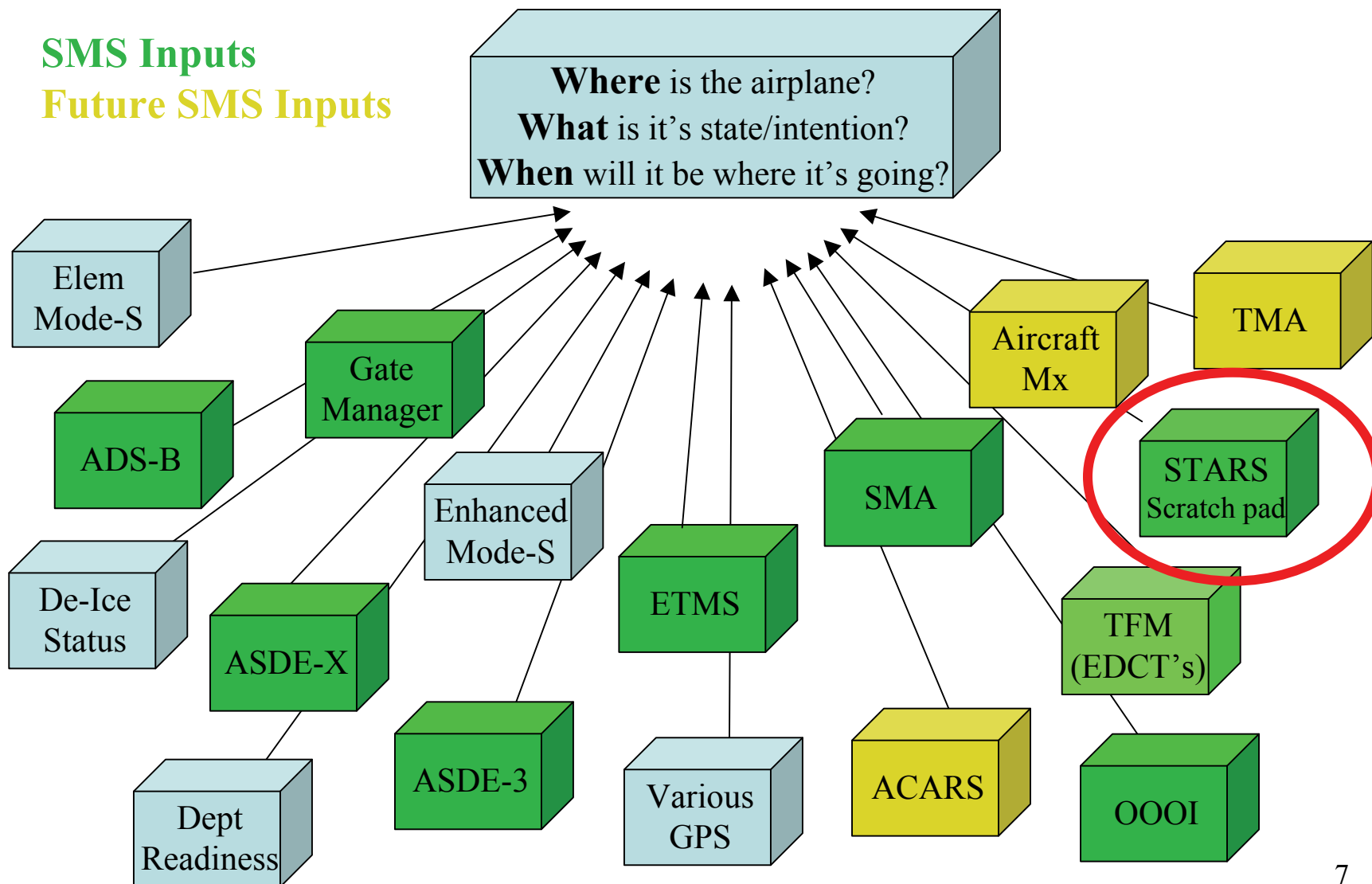
Multitude of Inputs to Command & Control



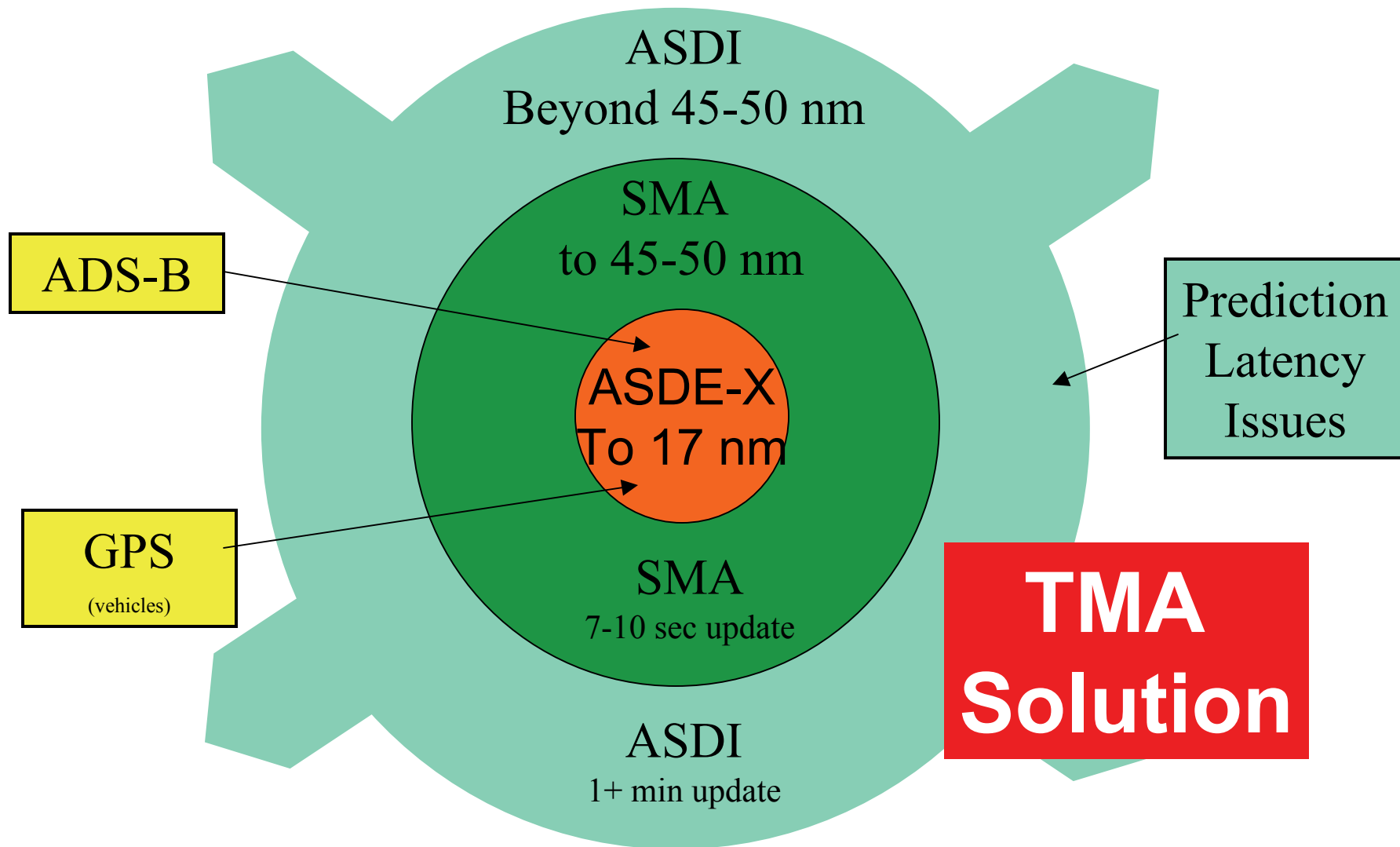
Multitude of Inputs to Command & Control

SMS Inputs

Future SMS Inputs



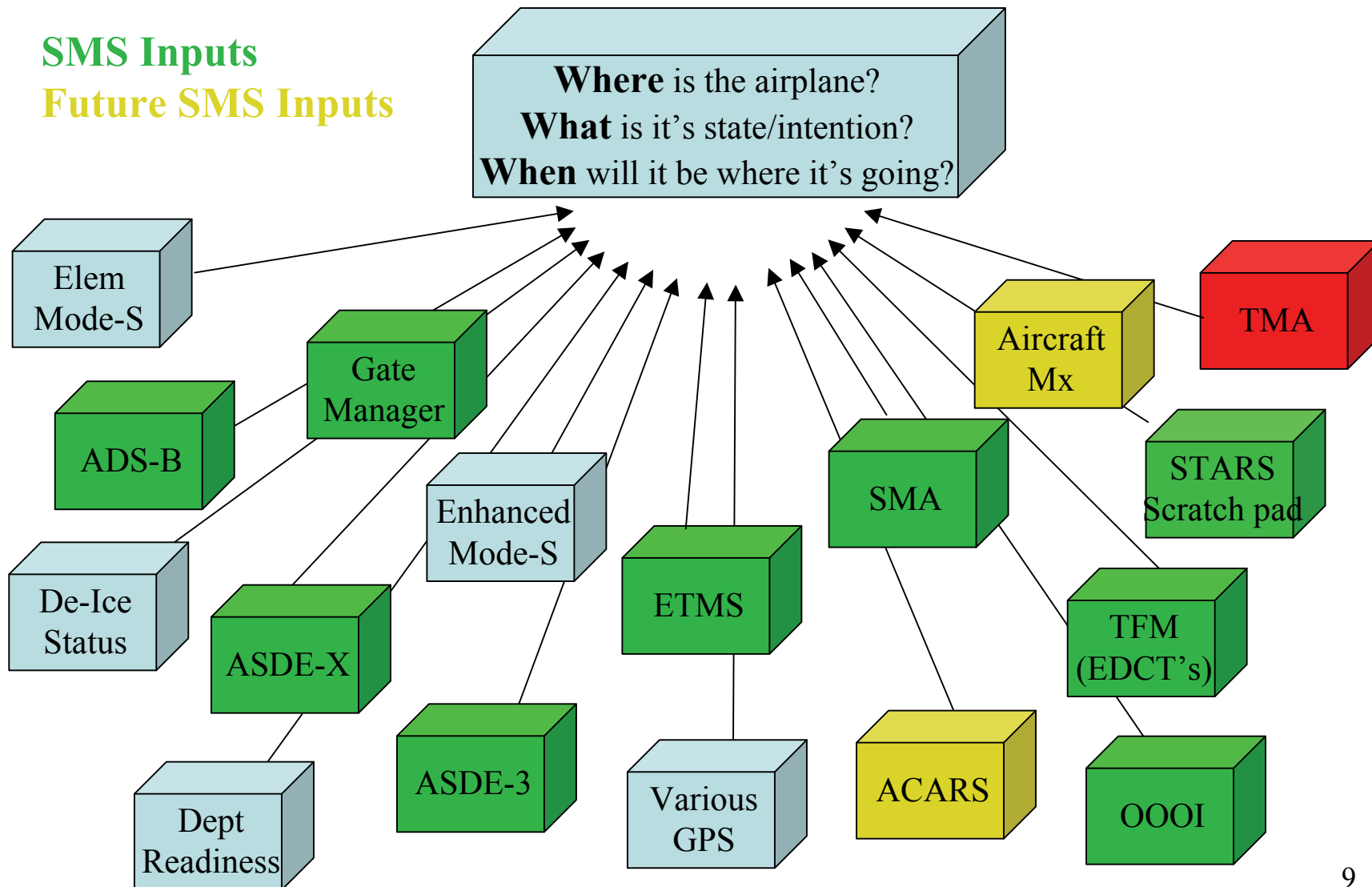
Surveillance into SMS/SDSS



Multitude of Inputs to Command & Control

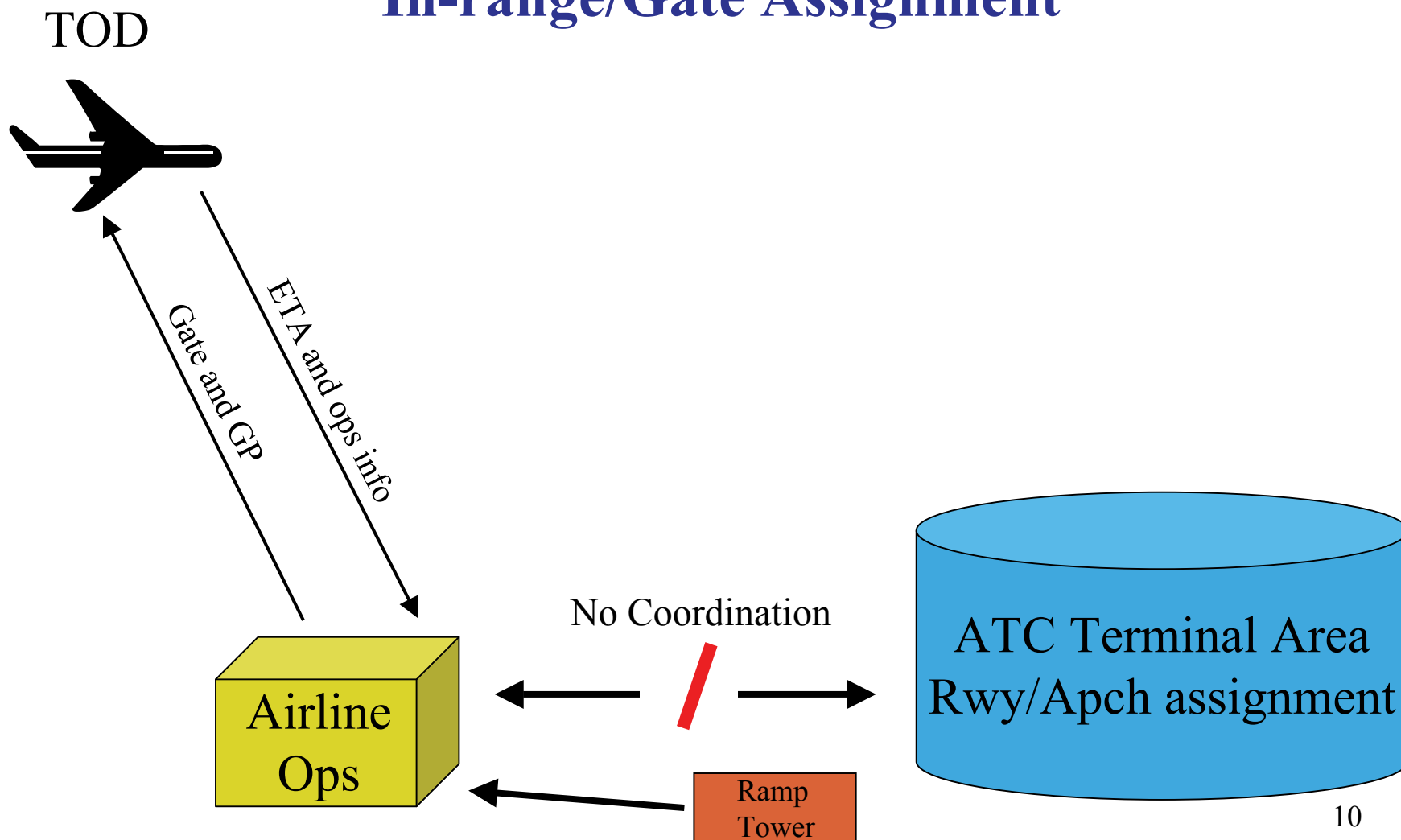
SMS Inputs

Future SMS Inputs



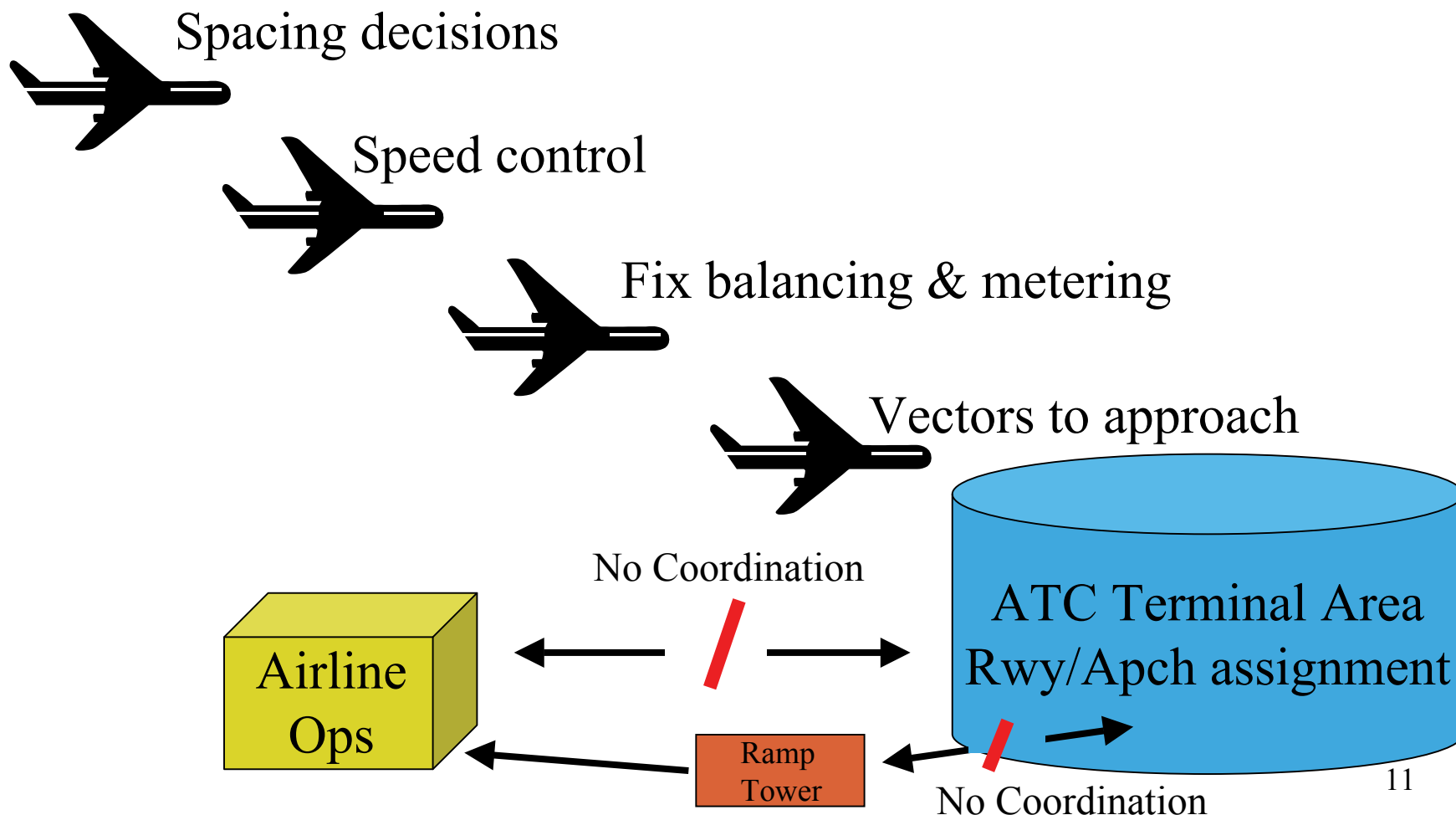
An Uncoordinated Action

In-range/Gate Assignment



An Uncoordinated Action

In-range/Gate Assignment



Can Be a Coordinated Action

In-range/Gate Assignment

TOD



Spacing decisions



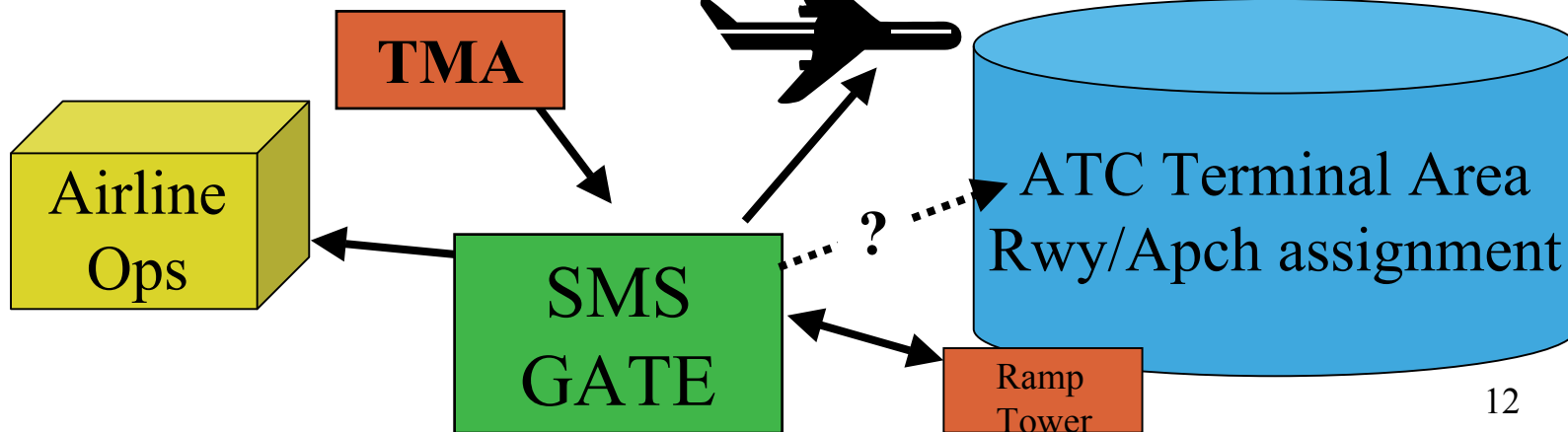
Speed control



TMA Rwy Assignment

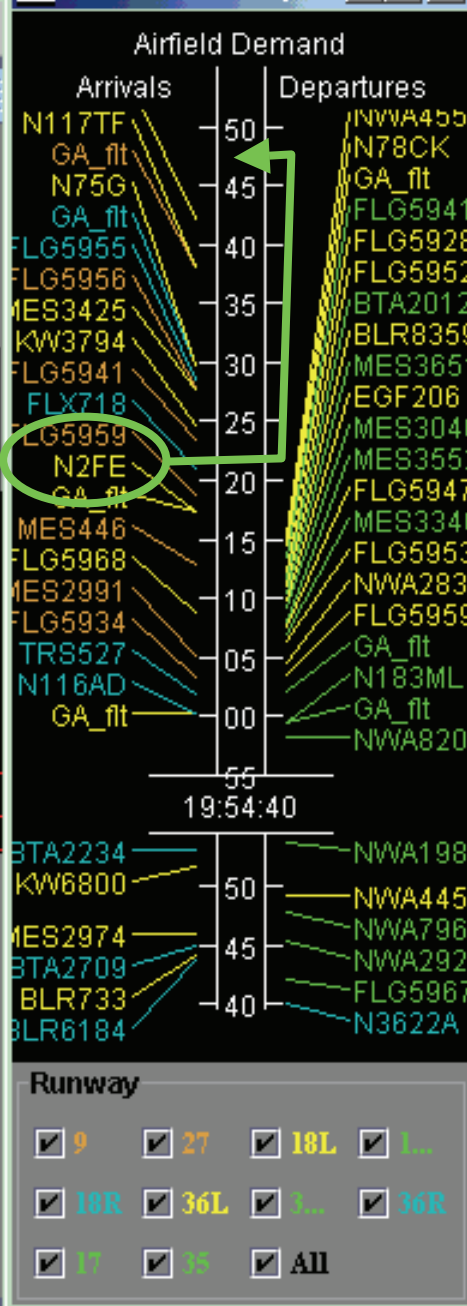
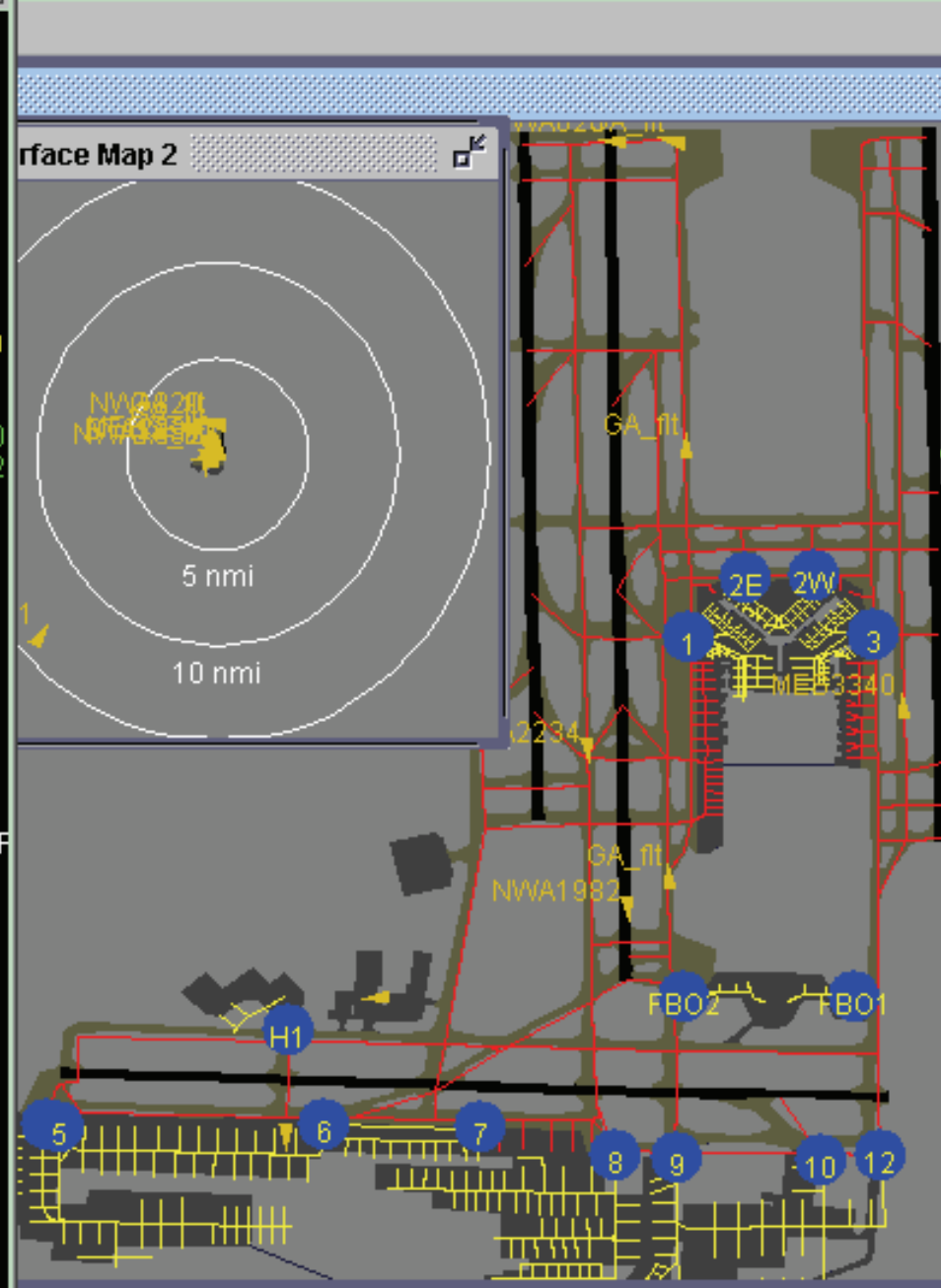
Fix balancing & metering

SMS coordinates a gate/ramp assignment relative to landing runway



Other Examples of Uncoordinated Actions

- De-ice
- Push backs relative to ATM
 - ESP sequencing
 - Departure direction sequencing
 - AFP/EDCT Compliance
- Penalty box usage
- Airport construction
- Airport coordinated push backs

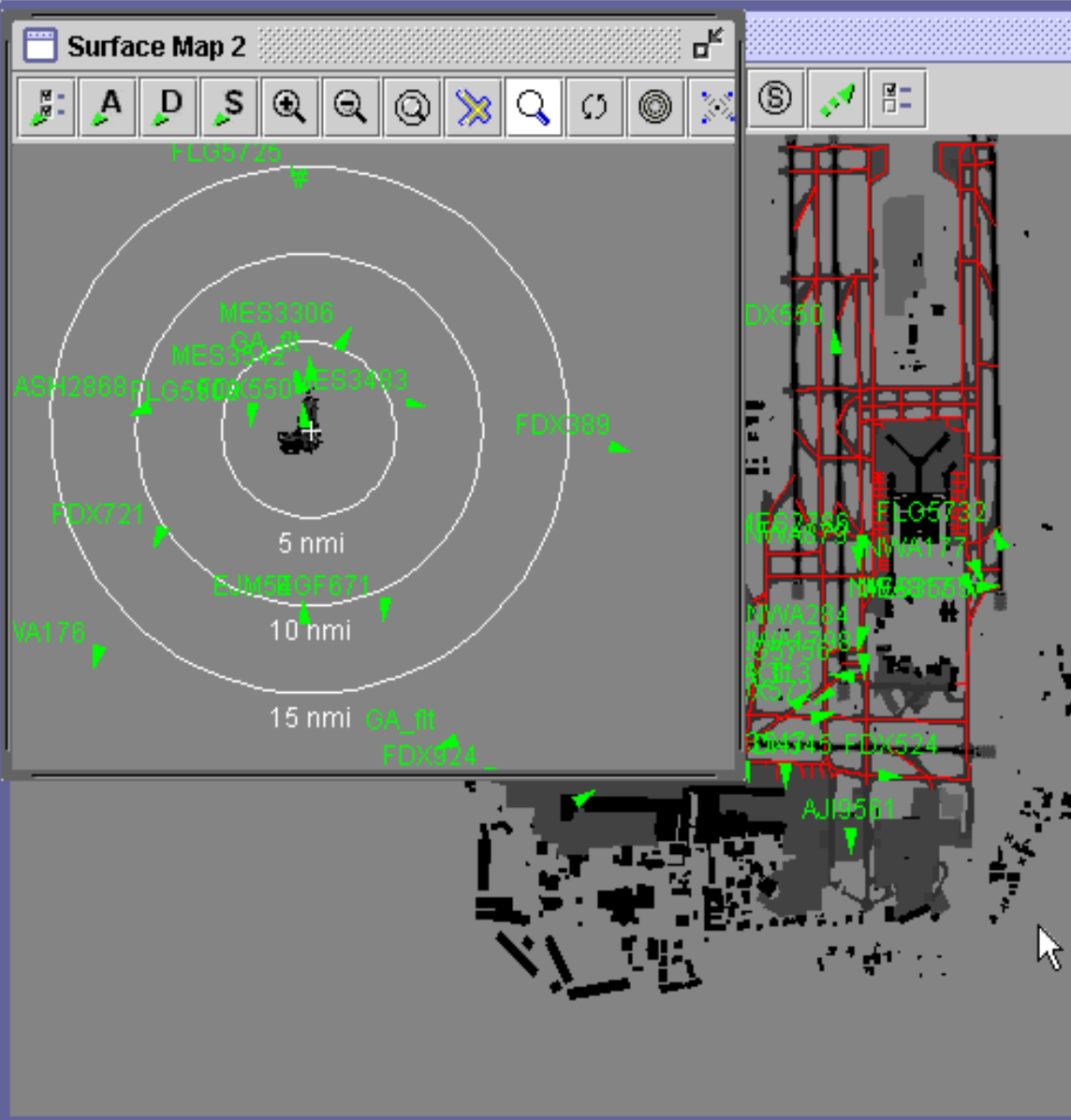


THANK YOU

for helping to ensure this is NOT the future!

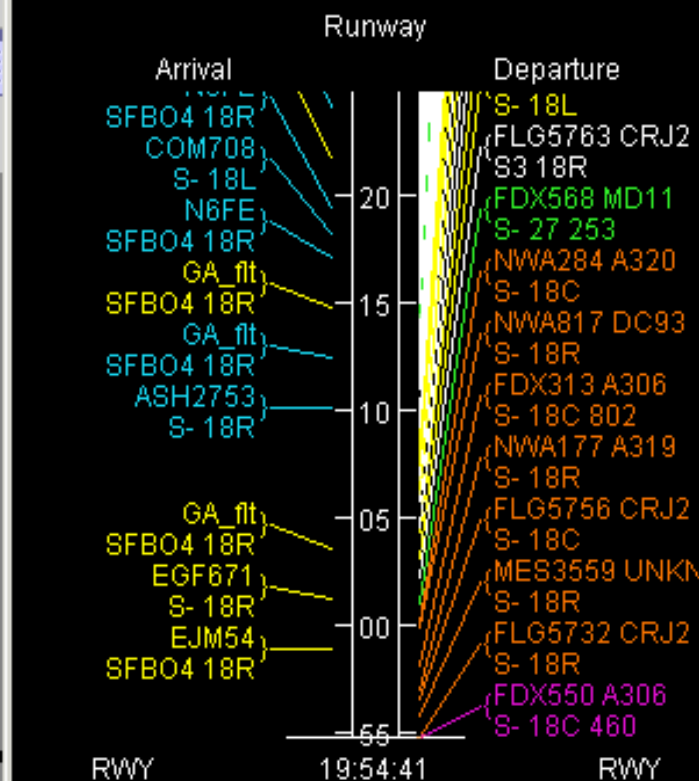


QUESTIONS ?



Current time: 19:54:42 GMT

Configuration: D: 18R 18C 18



Flight Status

- | | |
|---|---|
| <input checked="" type="checkbox"/> Unknown | <input checked="" type="checkbox"/> Scheduled_Out |
| <input checked="" type="checkbox"/> Ready_to_Push | <input checked="" type="checkbox"/> Push_Back |
| <input checked="" type="checkbox"/> In_Ramp_Out | <input checked="" type="checkbox"/> Taxi_Out |
| <input checked="" type="checkbox"/> In_Queue | <input checked="" type="checkbox"/> Off |
| <input checked="" type="checkbox"/> Scheduled_In | <input checked="" type="checkbox"/> En_Route |
| <input checked="" type="checkbox"/> In_Range | <input checked="" type="checkbox"/> Terminal_Airspace |
| <input checked="" type="checkbox"/> On_Final | <input checked="" type="checkbox"/> On |
| <input checked="" type="checkbox"/> In_Ramp_In | <input checked="" type="checkbox"/> In_Gate |
| <input checked="" type="checkbox"/> All | |